

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

4.12 TRAFFIC AND CIRCULATION

Section 4.12

4.12.1 Introduction

*Traffic and
Circulation*

This section of the EIR describes the existing transportation and traffic conditions on roadways surrounding the project area, and analyzes the potential for implementation of the proposed project to cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system; exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways; result in inadequate emergency access; result in inadequate parking capacity; or conflict with applicable policies, plans, or programs supporting alternative transportation. The Initial Study concluded that the project would not substantially increase traffic hazards due to design features or incompatible uses. However, during the public scoping period, concerns related to pedestrian safety were identified, and, therefore, this issue is analyzed in the EIR.

The information in this section is based upon information in the Traffic Impact Study conducted by Associated Transportation Engineers (ATE), which is included as Appendix A in this document. The full bibliographic entry for this reference material is provided in Section 4.12.6 (References).

Comments related to Transportation/Traffic were received in response to the NOP circulated for the proposed project. The NOP, responses to the NOP, and a summary of issues raised during scoping are included in Appendix A.

Comments on the NOP and at the Public Scoping meeting included suggestions that the EIR address: (1) the cumulative traffic and pedestrian safety impacts of all development resulting from the joint proposal; (2) the impacts of increased traffic levels in the North Campus area, in the Goleta area, as a result of the COPR parking lot expansion; and at Storke and Hollister Roads; (3) safety issues at the intersections of Hollister and Cannon Green and Marymount and Scripps Crescent; (4) realignment of Venoco Access Road to direct traffic to the Storke/El Collegio intersection; (5) Pacific Oaks, Reed Court, and Scripps Crescent need improvements to accommodate more traffic; (6) speed bumps on Marymount Way to slow traffic; (7) extending Phelps Road to Los Carneros to help move traffic from Storke/Hollister and Highway 101; (8) the lack of demand for additional parking near coastal bluffs; (9) the effects on parking at the University; (10) shuttle bus service to campus and shopping areas; and (11) providing bicyclist safety with one-way roads and bike lanes.

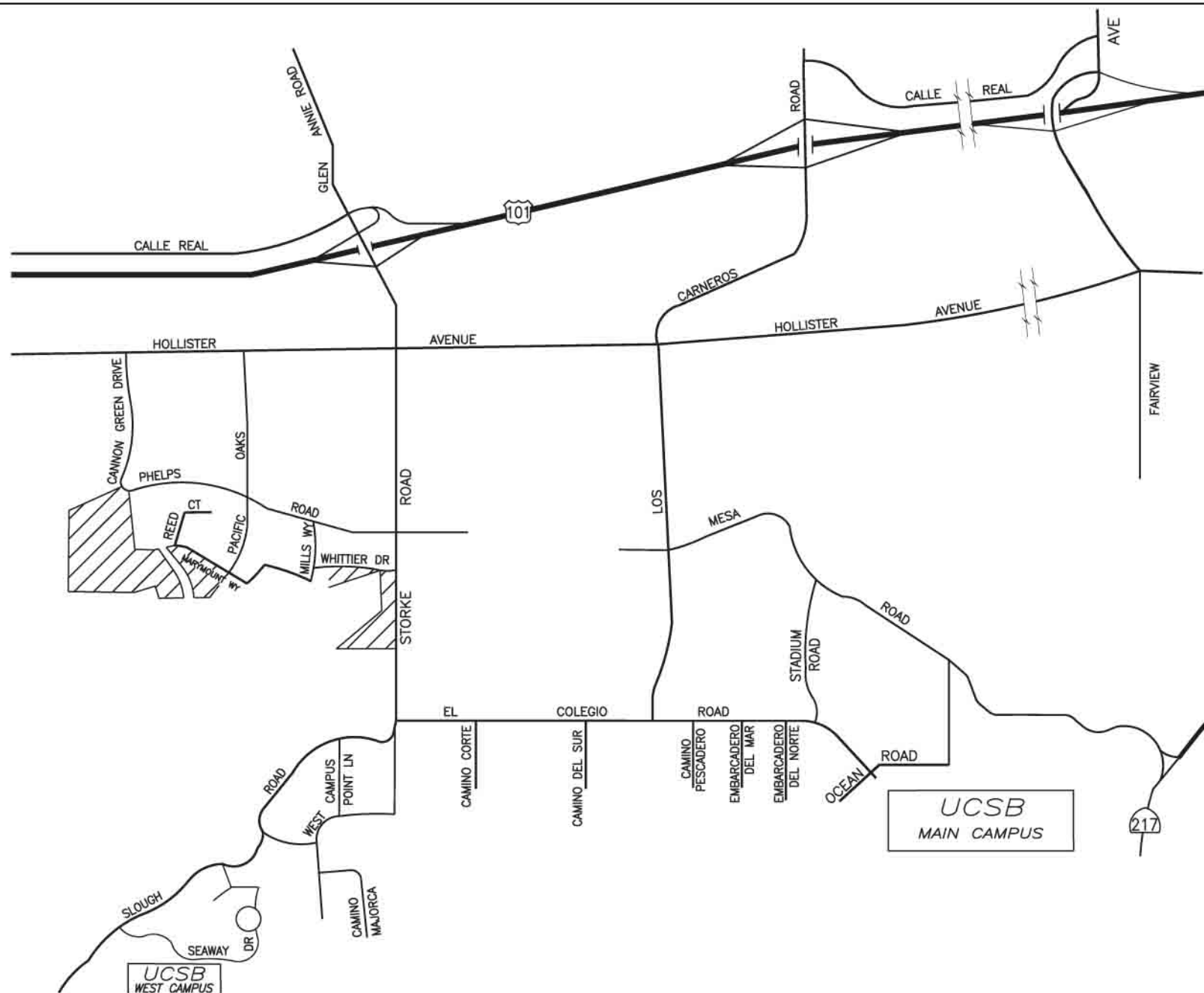
4.12.2 Existing Conditions

4.12.2.1 Existing Street Network


The circulation system adjacent to the project site is comprised of regional highways, arterial streets, and collector streets. The principal components of this street network are discussed in the following text and illustrated in Figure 4.12-1.



NOT TO SCALE



LEGEND

 - Project Site



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

Figure 4.12-1. Project Site/Existing
Street Network

April
2004

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12

**Traffic and
Circulation**

U.S. Highway 101. U.S. Highway 101 extends along the Pacific Coast between Los Angeles and San Francisco. Within Santa Barbara County, this four to six-lane highway provides the principal route between the City of Goleta and the cities of Santa Barbara, Carpinteria, and Ventura to the south; and Buellton and Santa Maria to the north. Access between U.S. Highway 101 and the project site is provided via the Storke Road interchange.

Hollister Avenue. Hollister Avenue is a four-lane arterial street that serves as the major east/west surface street route in the Goleta area. Hollister Avenue extends easterly from its terminus at the U.S. Highway 101 interchange adjacent to Winchester Canyon Road through the City of Goleta. East of the Goleta area, Hollister Avenue connects to State Street, which extends into the City of Santa Barbara. Within the study area, Hollister Avenue is signalized at the Storke Road, Pacific Oaks Road, Marketplace Drive, and Los Carneros Road intersections.

Storke Road. Storke Road is a north/south arterial street that is four lanes wide between U.S. Highway 101 and Phelps Road. South of Phelps, Storke Road narrows to three lanes. Storke Road provides freeway access to the western portion of the Goleta Valley, including the Isla Vista and University areas, via an interchange at U.S. Highway 101. North of the interchange, Storke Road becomes Glen Annie Road and extends as a two-lane road to Cathedral Oaks Road. Storke Road is signalized at the U.S. Highway 101 northbound and southbound ramps, Hollister Avenue, Marketplace Drive, Phelps Road, and El Colegio Road intersections.

El Colegio Road. El Colegio Road, located east of the project site, is an east/west two- and four-lane arterial that provides access to the Isla Vista community as well as the University main campus. El Colegio Road extends as a four-lane roadway between Storke Road and a point east of Camino Corto Lane, where it narrows to a two-lane roadway and extends easterly to the University campus West Gate entrance. El Colegio Road is controlled by traffic signals at Storke Road, Camino Corto, Los Carneros Road, Embarcadero Del Mar, and Stadium Road.

Los Carneros Road. Los Carneros Road is a north/south arterial street. North of Hollister Avenue, Los Carneros Road extends north as a four-lane road connecting with the U.S. Highway 101 interchange and Calle Real. South of Hollister Avenue, Los Carneros Road extends as a two-lane road to El Colegio Road, providing one of the primary access routes to the Isla Vista-University area. Within the study area, Los Carneros Road is signalized at Hollister Avenue, Mesa Road, and El Colegio Road.

Phelps Road. Phelps Road extends east of Cannon Green Drive as an east/west two-lane connector to Storke Road. Phelps Road also extends easterly from Storke Road serving the Storke Ranch residential development. Phelps Road provides access to the residential areas located adjacent to the project site. The roadway is signalized at Storke Road and controlled by a stop sign at Pacific Oaks Road.

Pacific Oaks Road. Pacific Oaks Road, a north/south two- and four-lane roadway, extends from Marymount Way to Hollister Avenue. This roadway would provide an access route

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 between the project site and the Camino Real Marketplace and University Village Shopping
Traffic and Centers, located adjacent to Hollister Avenue.
Circulation

Cannon Green Drive. Cannon Green Drive, located just north of the project site, is a two-lane north/south collector street that extends between Phelps Road and Hollister Avenue. This roadway serves a variety of residential uses located along its reach.

Whittier Drive. Whittier Drive is a two-lane local east/west street that extends between Storke Road and Mills Way. Whittier Drive would provide direct access to the northern portion of the student housing site.

Marymount Way. Marymount Way is a two-lane local street located just north of the Ocean Meadows Golf Course. Access to a portion of the faculty housing site is provided from Marymount Way.

4.12.2.2 Alternative Transportation Modes

The following subsection discusses the transit, bicycle, and pedestrian facilities present in the study area adjacent to the Faculty and Family Student Housing sites.

4.12.2.2.1 Transit Facilities. The University Faculty and Family Student Housing and Open Space Plan sites are served by several transit lines operated by the Metropolitan Transit District (MTD). MTD bus stops are located on the east and west side of Storke Road adjacent to the student housing site (opposite Phelps Road and Whittier Drive). MTD Line 12 (Goleta Express) provides a connection between the Camino Real Marketplace and downtown Goleta and the Transit Center in the City of Santa Barbara. This service is provided every 30 minutes, seven days a week. Line 24 (University Express) provides a direct connection between the project site and the University and the Camino Real Marketplace, as well as downtown Santa Barbara. Service is provided every 30 minutes during the peak commute periods. Line 23 provides local service from the University via Storke Road to the Winchester Canyon area. This line runs every 60 minutes and every 30 minutes on weekday evenings. Line 27, which only operates when the University is in session, provides additional access between Storke Road and the University and Isla Vista. This line runs every 30 minutes.

The various bus lines discussed above provide frequent transit service between the University Faculty and Family Student Housing and Open Space Plan sites and the University, downtown Goleta, western Goleta, as well as Santa Barbara. The Transit Center located on the University Main Campus also provides connections to several other routes that serve Goleta and provide additional connections to Santa Barbara. The University and MTD provide subsidized bus passes to all students with current registration cards, thus promoting ridership in the University/Isla Vista area.

4.12.2.2.2 Bicycle Facilities. Several on and off-street bicycle facilities are located adjacent to the University Faculty and Family Student Housing and Open Space Plan project.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

These include Class I (off-street bike path) facilities on Los Carneros Road between Hollister Avenue and El Colegio Road, and on El Colegio Road between Storke Road and the University Main Campus. This Class I bikeway provides access between the project and the University Main Campus. A Class I bikeway has been constructed along the north side of Phelps Road east of Storke Road. It is anticipated that this bikeway will ultimately be extended to Los Carneros Road. Class II (on-street bike lane) facilities are present on Storke Road between Hollister Avenue and El Colegio Road (adjacent to the student housing site), on Phelps Road between Storke Road and Pacific Oaks Road, and on Hollister Avenue between Los Carneros Road and Via Jero Drive. Due to the high utilization of bicycles in the University/Isla Vista areas, these bicycle facilities are typically well traveled by area residents and students.

Section 4.12

Traffic and
Circulation

4.12.2.2.3 Pedestrian Facilities. The majority of the streets in the study area have been constructed with curb, gutter, and sidewalks. Several roadway sections are not, however, fully improved with sidewalks, including:

Phelps Road. No sidewalk facilities have been constructed along the south side of Phelps Road between Storke Road and Pacific Oaks Road.

Marymount Way. The segment of Marymount Way located adjacent to the faculty housing site does not have sidewalk facilities on the south side of the roadway.

Storke Road. A decomposed granite path has been installed along the east side of Storke Road adjacent to the Storke Ranch housing development.

4.12.2.3 Roadway Operations

Figure 4.12-2 illustrates the existing average daily traffic (ADT) volumes for the street segments in the vicinity of the site, which were obtained from recently completed counts conducted by the City of Goleta, the County of Santa Barbara, and ATE. The operational characteristics of the study-area roadway segments were analyzed based on engineering roadway capacities. In rating a roadway's operating condition, Levels of Service (LOS) A through F are used, with LOS A indicating very good operations with little congestion, and LOS F indicating poor operations with heavy congestion. City and County policies state that LOS C is acceptable for all roadways.

Comparison of the existing ADT volumes with the City and County's design capacities indicates that most of the roadway segments in the study area are currently operating at LOS C or better. The following segments currently operate below the City and County LOS C standard:

- The two-lane segments of El Colegio Road east and west of Los Carneros Road operate at LOS F based on the design capacity of 17,900 ADT and the existing volumes of 21,500 and 20,600 ADT, respectively.



ADT



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

Figure 4.12-2. Existing Average Daily Traffic Volumes

April
2004

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

- The two-lane segment of Los Carneros Road between Hollister Avenue and Mesa Road operates at LOS F, and the two-lane segment of Los Carneros Road between Mesa Road and El Colegio Road operates at LOS E, based on the County design capacity of 19,900 ADT and the existing volumes of 22,900 ADT and 19,800 ADT, respectively.

Section 4.12

Traffic and
Circulation

4.12.2.4 Intersection Operations

Because traffic flow on urban street networks is most restricted at intersections, a detailed traffic analysis must examine the operating conditions of critical intersections during peak travel periods. The LOS grading system discussed previously for roadway operations is also used in rating intersection operations. City and County policies state that LOS C is acceptable for intersection operations.

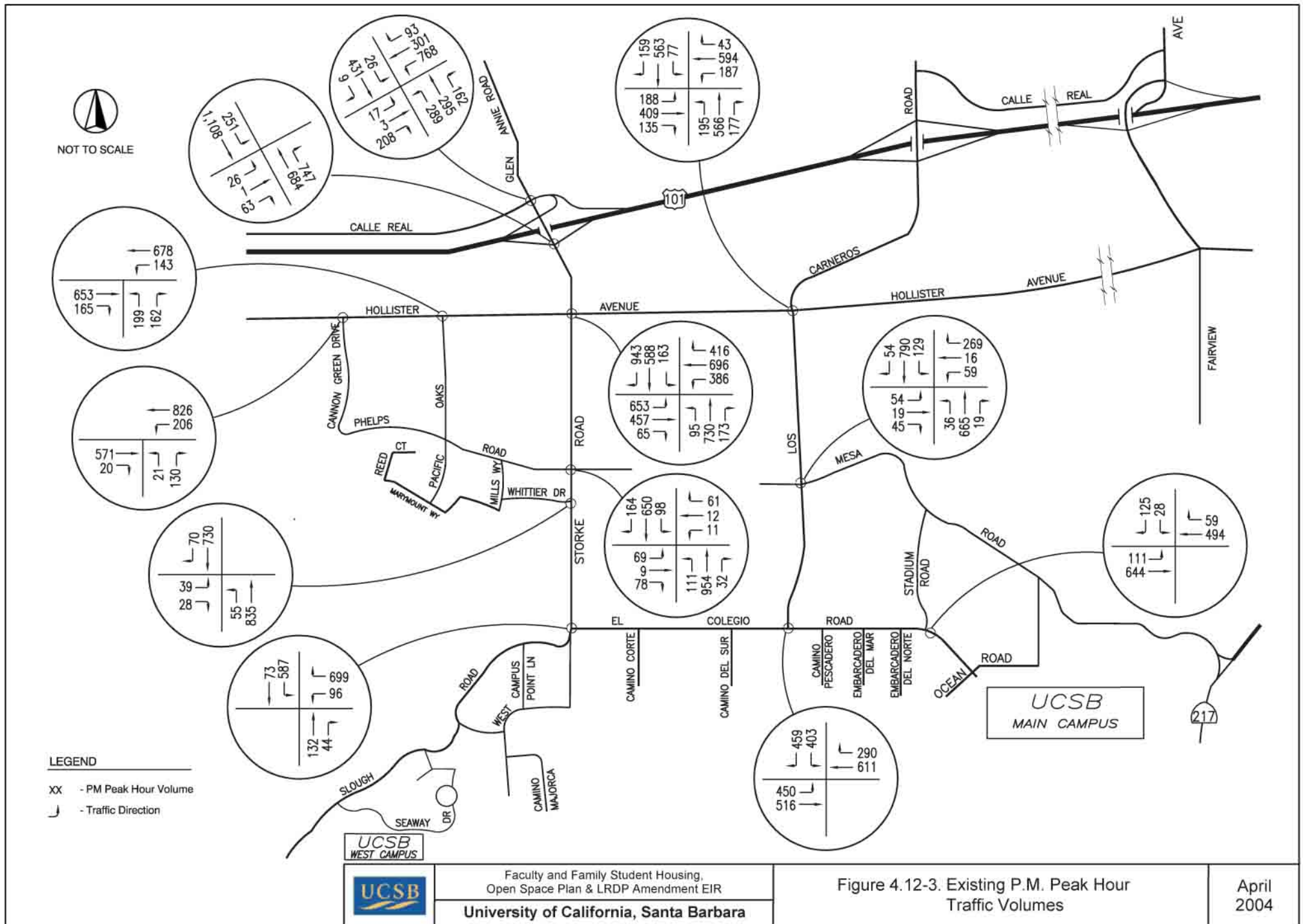
P.M. peak hour turning volumes were obtained for the critical study-area intersections in order to determine existing levels of service. Figure 4.12-3 illustrates the existing P.M. peak hour traffic volumes at the study-area intersections, which were obtained from counts conducted by the City of Goleta, the County, and ATE in 2003 and 2004. Levels of service were calculated for the signalized intersections using the Intersection Capacity Utilization (ICU) methodology. LOS for the stop sign-controlled intersection at Storke Road and Whittier Drive was determined based on the delay ranges outlined in the Highway Capacity Manual and vehicle delays measured in the field. LOS calculation worksheets are attached for reference in Appendix B of this EIR. Table 4.12-1 lists the type of control, the existing level of service, and the jurisdictional location for each study-area intersection.

Table 4.12-1. Existing P.M. Peak Hour Intersection Levels of Service

Intersection	Jurisdiction	Control	V/C Ratio	LOS
Hollister Avenue/Cannon Green Drive	City of Goleta	I-Way Stop	11.2 sec ¹	LOS B
Hollister Avenue/Pacific Oaks Road	City of Goleta	Signal	0.56	LOS A
Storke Road/U.S. 101 NB Ramps – Calle Real	City of Goleta	Signal	0.59	LOS A
Storke Road/U.S. 101 SB Ramps	City of Goleta	Signal	0.49	LOS B
Storke Road/Hollister Avenue	City of Goleta	Signal	0.84	LOS D
Storke Road/Phelps Road	City of Goleta	Signal	0.56	LOS A
Storke Road/Whittier Drive	City of Goleta	I-Way Stop	16.6 sec ¹	LOS C
Storke Road/El Colegio Road	County	Signal	0.43	LOS A
Los Carneros Road/Hollister Avenue	City of Goleta	Signal	0.64	LOS B
Los Carneros Road/Mesa Road	County	Signal	0.80	LOS C
Los Carneros Road/El Colegio Road	County	Signal	1.02	LOS F
Stadium Road/El Colegio Road	County	Signal	0.57	LOS A

¹V/C ratio not applicable for stop sign-controlled intersections. LOS based on average vehicle delay.

Bolded values exceed County LOS C standard.



FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

The data presented in Table 4.12-1 indicate that most of the study-area intersections currently operate at LOS C or better during the P.M. peak hour period, which are considered acceptable service levels. The Storke Road/Hollister Avenue intersection operates at LOS D and the El Colegio Road/Los Carneros Road intersection operates at LOS F.

Section 4.12
Traffic and
Circulation

4.12.3 Regulatory Framework

4.12.3.1 Federal

There are no federal regulations related to traffic and transportation that are applicable to the proposed project.

4.12.3.2 State and Local

The proposed project would be subject to the provisions of the Santa Barbara County Congestion Management Program, which designates major highway and road segments within the project vicinity, and requires an assessment of the project's potential impacts on the designated roadways, which include Hollister Road and U.S. Highway 101.

4.12.4 Project Impacts and Mitigation

4.12.4.1 Methodology

To estimate the potential for project implementation to cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, or to exceed a LOS standard established by the County Congestion Management Agency for designated roads or highways, the impact of projected increases in residential population and public parking were evaluated to determine the associated trip generation. Additional vehicular trips were assigned to the street and highway network in the vicinity of the project area. To evaluate the potential for the project to substantially increase traffic hazards due to design features or incompatible uses, or to result in inadequate emergency access, the proposed circulation plan residential development and open space improvements were reviewed. The potential for the project to result in inadequate parking capacity was evaluated based on the parking supply proposed for each residential development and the proposed public parking lots. To evaluate whether the project would conflict with applicable policies, plans, or programs supporting alternative transportation, project consistency with applicable LRDP Policies was evaluated. Trip generation estimates for the project components are described below.

North Campus, North Parcel—Faculty Housing. Trip generation estimates for the Faculty Housing component were calculated based on the rates for Single-Family Detached Housing (ITE #210) and Residential Condominium/Townhouse (ITE #230) presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual (ITE, 1997). The standard ITE rates were modified to account for alternative modes of transportation that are commonly used by residents in the University/Isla Vista area (i.e., bicycle, bus, walking, etc.).

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 **North Campus, Storke-Whittier—Family Student Housing.** Trip generation estimates for the Family Student Housing component were based on traffic counts performed at an existing University married student housing facility located just west of Los Carneros Road (Storke Campus).

Traffic and Circulation

Open Space Plan Parking Areas—University Jurisdiction. Trip generation estimates for the Open Space Plan parking areas within the University jurisdiction were calculated based on daily and P.M. peak hour trip rates per parking space. These rates were developed by ATE for the Open Space Plan using data contained in the Preliminary Concepts for the Ellwood-Devereux Coast Open Space and Habitat Management Plan document (Ellwood-Devereux Joint Review Panel, 2003), the Joint Proposal for the Ellwood-Devereux Coast press release (Ellwood-Devereux Joint Review Panel, 2002), and the SANDAG Traffic Generators report (San Diego Association of Governments, 2002). A summary outlining the trip generation calculation method for the Open Space Plan is included in the Technical Appendix.

Four off-street parking areas are proposed within the University jurisdiction: a 12-space parking lot off the Phelps Road/Cannon Green Drive intersection; a 20-space parking lot adjacent to Cameron Hall south of the Storke Road/El Colegio Road intersection; a 20-space parking lot west of Camino Majorca at its southern terminus; and a 20-space parking lot at Coal Oil Point (which would be closed from dusk to dawn), for a total of 84 coastal access off-street parking spaces. Existing parking within the University jurisdiction exists on a dirt parking lot south of the Phelps Road/Cannon Green Drive intersection. This lot contains approximately 10 parking spaces. The net-added number of parking spaces associated with the Open Space Plan within the University jurisdiction is thus 74 parking spaces. Table 4.12-2 shows the project trip generation estimates for the project.

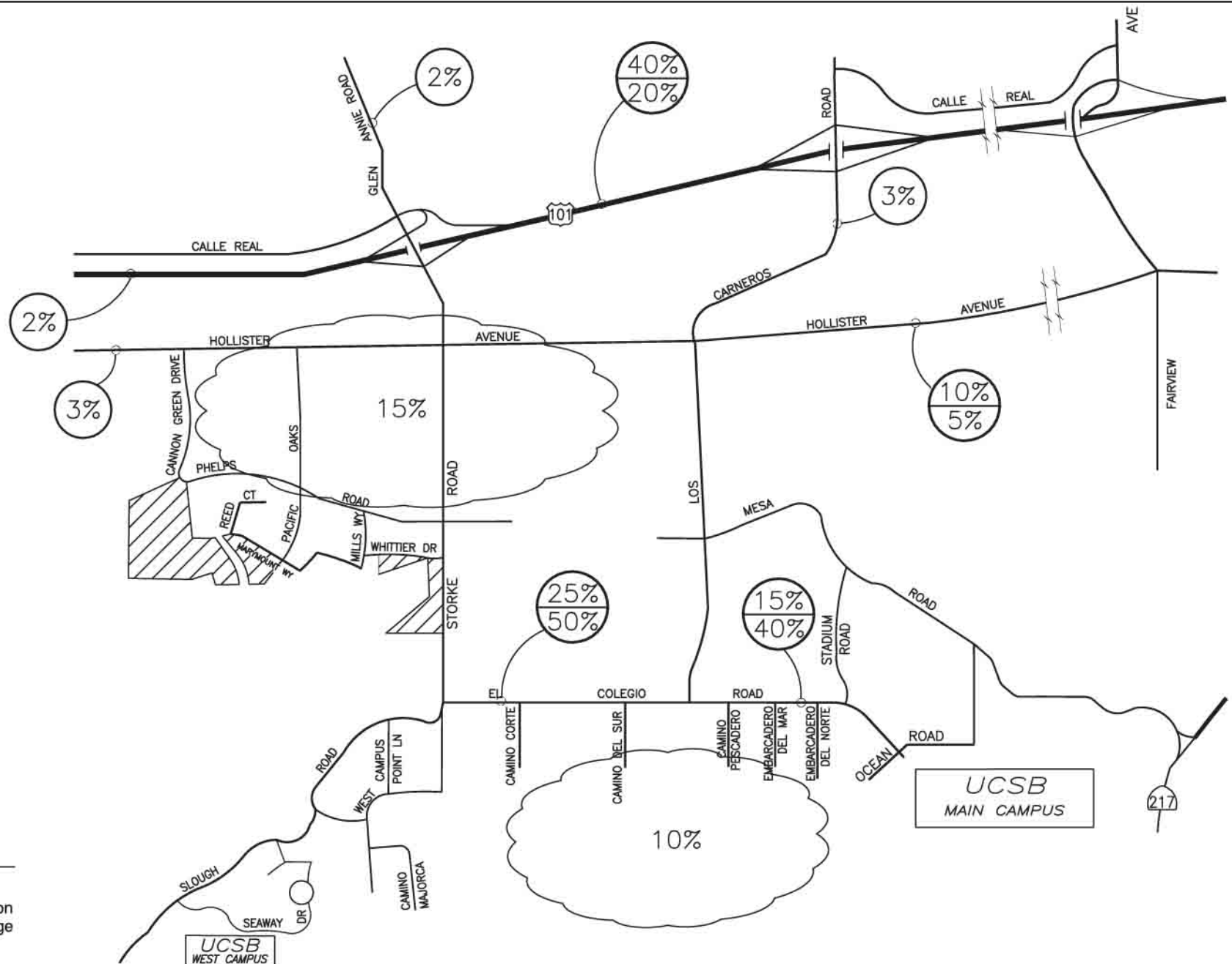
Trip Distribution. Trip distribution percentages for the Faculty and Family Student Housing component of the UCSB project were developed based on existing traffic volumes, a general knowledge of the UCSB student/faculty population, and the location of regional employment, commercial and recreational centers.

Separate distributions for the daily and P.M. peak hour traffic volumes were developed due to the unique travel characteristics of UCSB faculty, staff, and students. The distribution of daily traffic assumes a more regional trip distribution to account for travel to destinations in the Goleta - Santa Barbara area. The distribution of P.M. peak hour traffic assumed a more local distribution pattern to and from the UCSB and Isla Vista areas.

Traffic generated by the Faculty and Family Student Housing and Open Space Plan was assigned to the study-area street system and intersections in accordance with the trip distribution percentages shown in Tables 4.12-3 and 4.12-4. Trip distribution percentages for the Open Space Plan component within the UCSB jurisdiction were developed based on the local and regional residential demographics and are shown in Table 4.12-4. Figure 4.12-4 shows the trip distribution percentages for the Faculty and Family Student Housing component.



NOT TO SCALE



LEGEND



- Distribution Percentage

UCSB
WEST CAMPUS



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

Figure 4.12-4. Project Trip Distribution Percentages

April
2004

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12

Traffic and
Circulation

**Table 4.12-2. Faculty and Family Student Housing and
Open Space Plan Trip Generation Estimates**

Land Use	Size	ADT		P.M. PHT	
		Rate	Trips	Rate	Trips
Faculty Housing					
Multi-Family Housing ¹	120 Units	8.34	998	0.62	74
Townhomes ¹	90 Units	8.34	749	0.62	56
Duplex Housing ²	14 Units	6.38	89	0.50	7
Detached Single Family Housing ³	12 Units	9.09	109	0.81	10
Family Student Housing					
Multi-Family Housing ⁴	151 Units	7.39	1,116	0.65	98
Open Space Plan					
Proposed Parking Facilities	72 spaces	4.65 ⁵	335	0.42 ⁵	30
Total			3,396	275	

Notes:

¹ ITE rates for Low-Rise Condominium/Townhouse (ITE #231) with adjustments for alternative commute trips (i.e. bicycle, walking etc.).

² ITE rates for Apartment (ITE #220) with adjustments for alternative commute trips (i.e. bicycle, walking etc.).

³ ITE rates for Single Family Detached (ITE #210) with adjustments for alternative commute trips (i.e. bicycle, walking etc.).

⁴ Rates derived from counts at existing UCSB married student housing (Storke Apartments).

⁵ Rates developed by ATE for proposed parking areas.

**Table 4.12-3. Faculty and Family Student Housing
Trip Distribution Percentages**

Origin/Destination	Direction	ADT %	PM Peak %
U.S. Highway 101	East	40%	20%
U.S. Highway 101	West	2%	2%
Glen Annie Road	North	2%	2%
Hollister Avenue Shopping Center Area	West	15%	15%
Hollister Avenue	East	10%	5%
Hollister Avenue	West	3%	3%
El Colegio Road	East	25%	50%
Los Carneros Road	North	3%	3%
Total		100%	100%

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Table 4.12-4. Open Space Plan Trip Distribution

Section 4.12

Traffic and
Circulation

Origin/Destination	Direction	Percentage
U.S. Highway 101	East	50%
	West	5%
Hollister Avenue	East	20%
	West	5%
Isla Vista/UCSB	East	10%
Local	--	10%
Total		100%

4.12.4.2 LRDP Policies

The Coastal Act Element of the LRDP included a range of policies and standards (herein termed LRDP policies) to demonstrate consistency of the LRDP, and projects implemented under the LRDP, with the statutory requirements of Chapter 3 of the Coastal Act (commencing with Section 30200). The following LRDP policies are relevant to Traffic and Circulation.

30210.3. Visitors shall be entitled to use the parking facilities on the campus after payment of the appropriate parking fee and in accordance with campus parking regulations. Visitors shall be entitled to park in lots 23 and 24 on the southwest side of the Main Campus.

30210.7. To provide parking for a potential seminar facility at Coal Oil Point, while protecting the area from overuse, parking for no more than 50 cars shall be provided at Coal Oil Point, subject to special permit.

30210.15. The campus shall continue to maintain and improve bicycle and pedestrian access ways to the beach as necessary to protect sensitive habitat areas and public safety.

30211.1. Motor vehicle traffic generated by new development shall not restrict or impede public access to or along the coast by exceeding the roadway capacity of existing coastal access routes on campus.

30253.14. In order to minimize energy consumption and vehicle miles traveled, the campus shall implement the following measure to manage parking demand and supply:

- (a) Implement the Transportation Demand Management Program with the goal of diverting at least 10 percent of all passenger trips to and from campus to alternatives to the single occupant automobile.

30253.15(b). To improve traffic flow and thereby reduce auto emissions, the Campus shall:

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12
Traffic and
Circulation

- (a) Make pedestrian, bicycle and road improvements as generally shown in Figure 3 (North and West Campus Housing LRDP Amendment). Exact alignments and intersection geometry may change during the project design phase.

30253.17. Maintain a minimum setback of 585 feet between the nearest Ellwood Marine Terminal storage tank and proposed residential structures.

4.12.4.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Santa Barbara County thresholds for roadway segments and individual intersections (see Table 4.12.5) are incorporated in these thresholds. If the addition of project traffic to an intersection increases the volume-to-capacity (V/C) ratio by the values provided in Table 4.12-5, the impact is considered significant. The County thresholds include whether project traffic would utilize a substantial portion of an intersection's capacity where the intersection is currently operating at acceptable levels of service but with cumulative traffic would degrade to or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate from 0.86 to 0.90 and a change of 0.01 for an intersection which would operate greater than 0.90. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact related to traffic and transportation if it would result in any of the following:

**Table 4.12.5. City of Goleta & County of Santa Barbara
Intersection Thresholds**

Significant Changes in Levels of Service	
Intersection Level of Service (Including Project)	Increase in V/C or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 Trips
LOS E	10 Trips
LOS F	5 Trips

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system
- Exceed, either individually or cumulatively, a LOS standard established by the County Congestion Management Agency for designated roads or highways
- Result in inadequate emergency access

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

- Result in inadequate parking capacity
- Conflict with applicable policies, plans, or programs supporting alternative transportation

Section 4.12

Traffic and
Circulation

4.12.4.4 **Effects Not Found to Be Significant**

Threshold. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project would not increase air traffic, nor result in a change in the location of air traffic given the 35-foot height restriction for the residential development and the distance from the Santa Barbara Municipal Airport. Because no changes in air traffic patterns would result, the Initial Study (included in Appendix A of this EIR) determined that no effects associated with substantial risks associated with changes in air traffic patterns would result, and no additional analysis is required in this EIR.

4.12.4.5 **Impacts and Mitigation**

Impact 4.12-1. Project implementation would result in additional vehicular trips, which could increase traffic volumes and degrade intersection levels of service. With implementation of the identified mitigation measures, this impact would be reduced to a *less-than-significant* level.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities would result in additional vehicular trips that would increase traffic volumes on the local street and highway network and degrade intersection levels of service.

The proposed project would include development of 236 units of faculty housing on the North Parcel and 151 units of family student housing on the Storke-Whittier Parcel, would increase the residential population within the project area, and result in the generation of vehicle trips by the occupants of the 387 units of new housing. Implementation of the portion of the Open Space Plan under the University's jurisdiction would result in coastal access improvements, including: 1) improvement of approximately 8.18 miles of existing trails, 2) improvement of three existing beach access points, 3) installation of one new coastal access stairway, 4) provision of up to 84 public parking spaces at four locations, and 5) replacement of an existing portable restroom at Coal Oil Point. In addition, sensitive coastal resources in open space areas would be managed, including restoration of degraded habitat. The improvements in coastal access, provision of public parking, and improvements to degraded habitat could increase recreational use of trails within the open space areas and increase public use of the beaches adjacent to the open space areas.

The data presented in Table 4.12-1 show that the project would generate 3,396 average daily trips, with 275 trips occurring during the P.M. peak hour. Figure 4.12-5 shows the project-added ADT and Figure 4.12-6 shows the project-added P.M. peak hour traffic volumes. Figure 4.12-7 shows existing plus project daily traffic volumes, Figure 4.12-8 shows existing plus project peak

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Section 4.12 hour traffic volumes, Figure 4.12-9 shows existing cumulative average daily traffic volumes, **Traffic and** Figure 4.12-10 shows existing cumulative P.M. peak hour volumes, Figure 4.12-11 shows **Circulation** cumulative plus project average daily traffic volumes, and Figure 4.12-12 shows cumulative plus project P.M. peak hour traffic volumes.

It is noted that these trip generation estimates represent a “worst-case” evaluation of the new traffic that would be generated by the project, as the analysis assumes that all of the students, faculty, and staff who would reside in the housing units, and users of the new coastal access parking spaces are new to the area. It is anticipated that many, and likely most, of the faculty and students that would reside in the proposed housing units would otherwise reside in existing housing located within the Isla Vista, Goleta, and Santa Barbara areas and that many of the users of the new coastal access parking spaces currently visit the area, park in other locations, or use alternative transportation.

Roadway Impacts

As noted above, the project would add 3,396 ADT to the study-area roadways. The operational characteristics of the roadway segments within the study-area were analyzed assuming the existing + project ADT volumes presented in Figure 4.12-7. Based on the County's roadway design capacities, it was determined that the most of the roadway segments in the study area would continue to operate acceptably at LOS C or better with existing + project ADT volumes.

The proposed project would be consistent with LRDP Policies 30210.15 and 30211.1 by providing and improving bicycle and pedestrian access ways to the beach, and including improvements to access roads to ensure that new motor vehicle traffic generated by the new development would not restrict or impede public access to or along the coast.

The text below discusses the roadway segments that would operate below LOS C with existing + project volumes and identifies the significance of the project's traffic additions. The threshold used to determine roadway impacts for segments exceeding the County's acceptable capacity rating or design capacity is a minimum traffic volume increase of 1.0%.

El Colegio Road. The existing traffic volumes on the segments of El Colegio Road located east and west of Los Carneros currently exceed the County's roadway design capacity for a two-lane arterial roadway. The project would add 660 ADT and 698 ADT on El Colegio Road east and west of Los Carneros Road respectively, increasing the ADT volumes on these segments by approximately 3%. This increase would result in a significant but mitigable impact (Class II) to El Colegio Road between Camino Corto Lane and Stadium Road.

Los Carneros Road. The existing traffic volumes on Los Carneros Road between Hollister Avenue and Mesa Road exceed the design capacity and the volumes between Mesa Road and El Colegio Road exceed the acceptable capacity. The project would not add appreciable traffic to the segment between Hollister Avenue and Mesa Road. The project would add 38 ADT to the



ADT

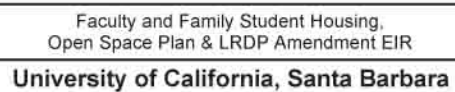
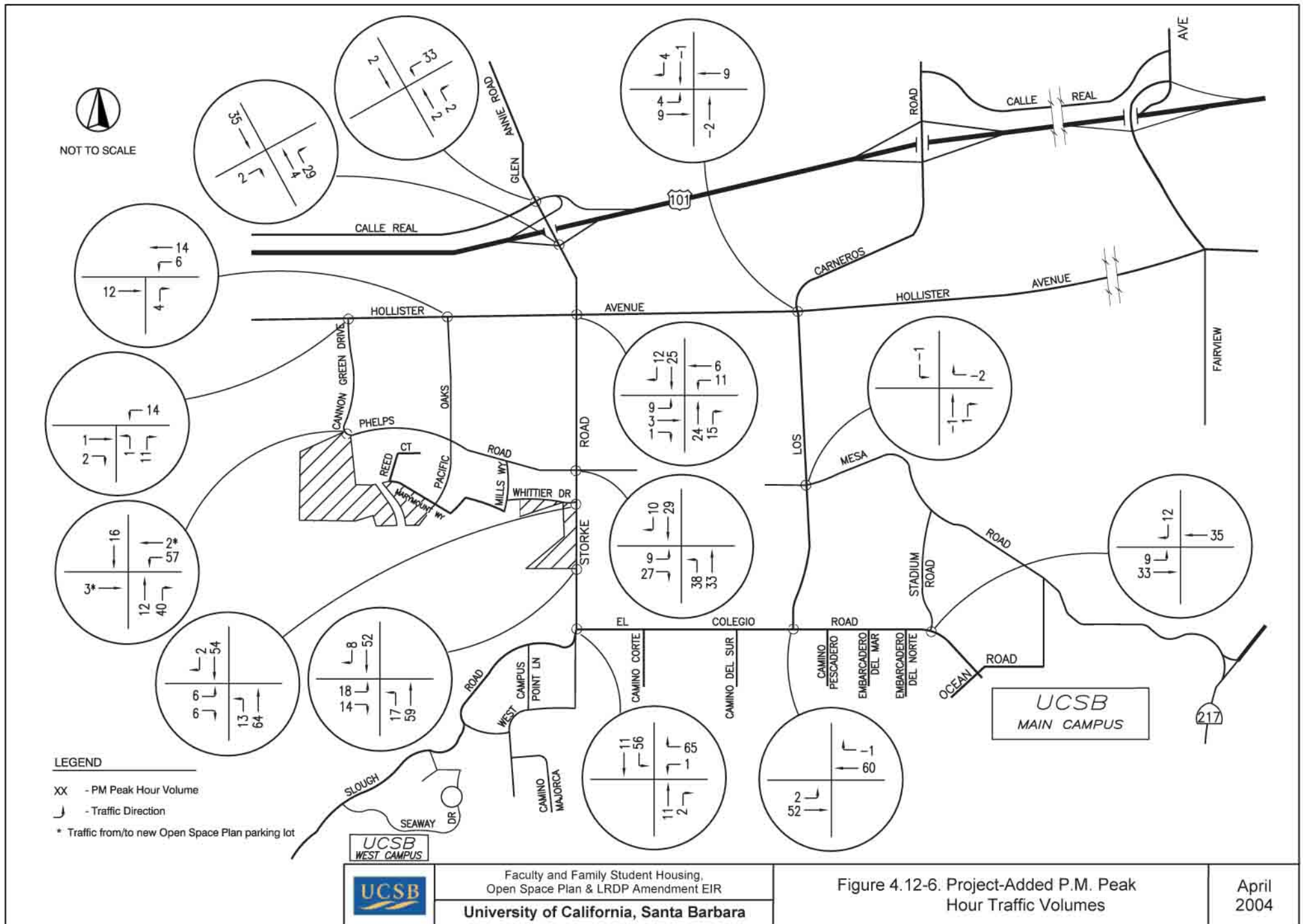


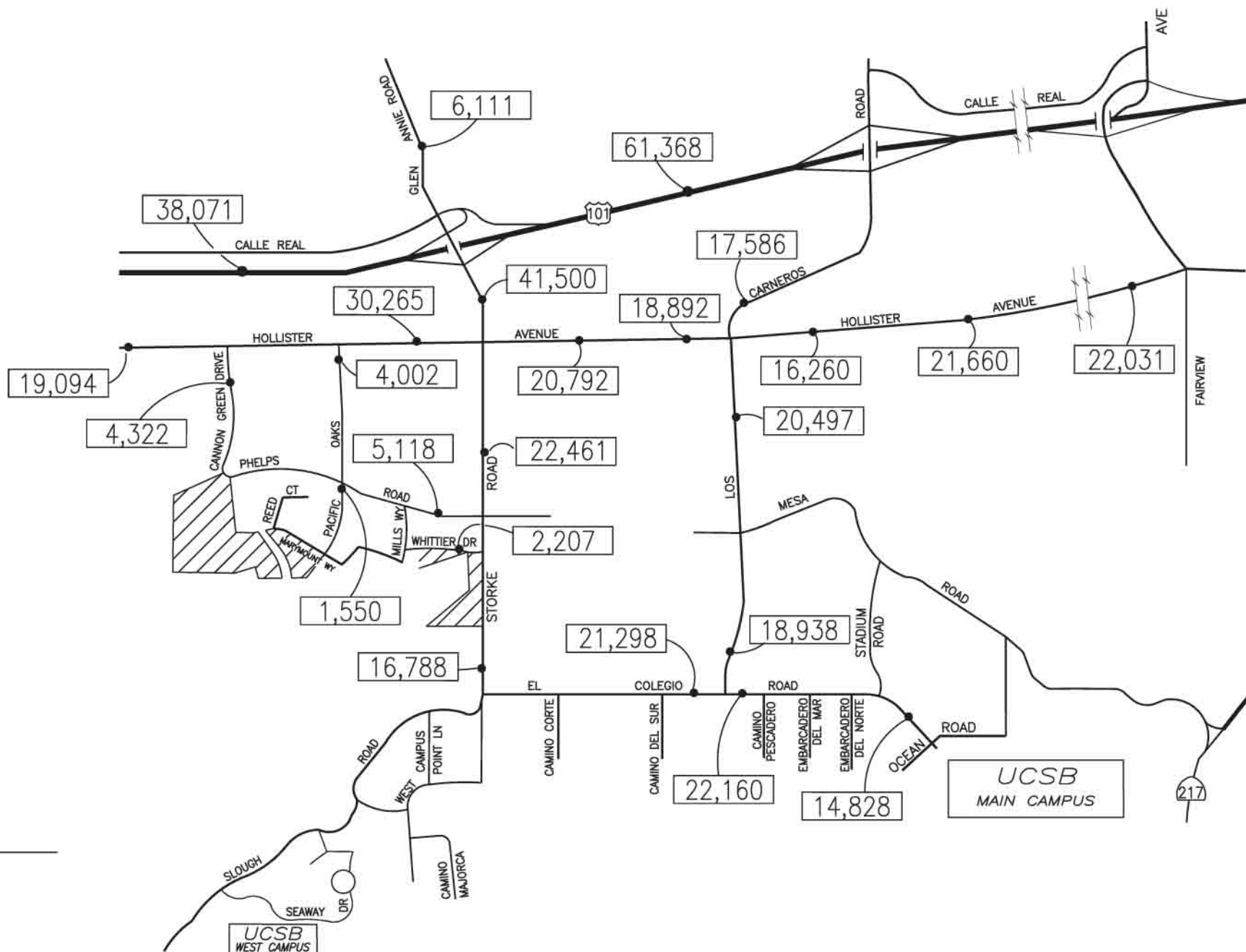
Figure 4.12-5. Project-Added Average Daily Traffic Volumes

April
2004





NOT TO SCALE



LEGEND

ADT

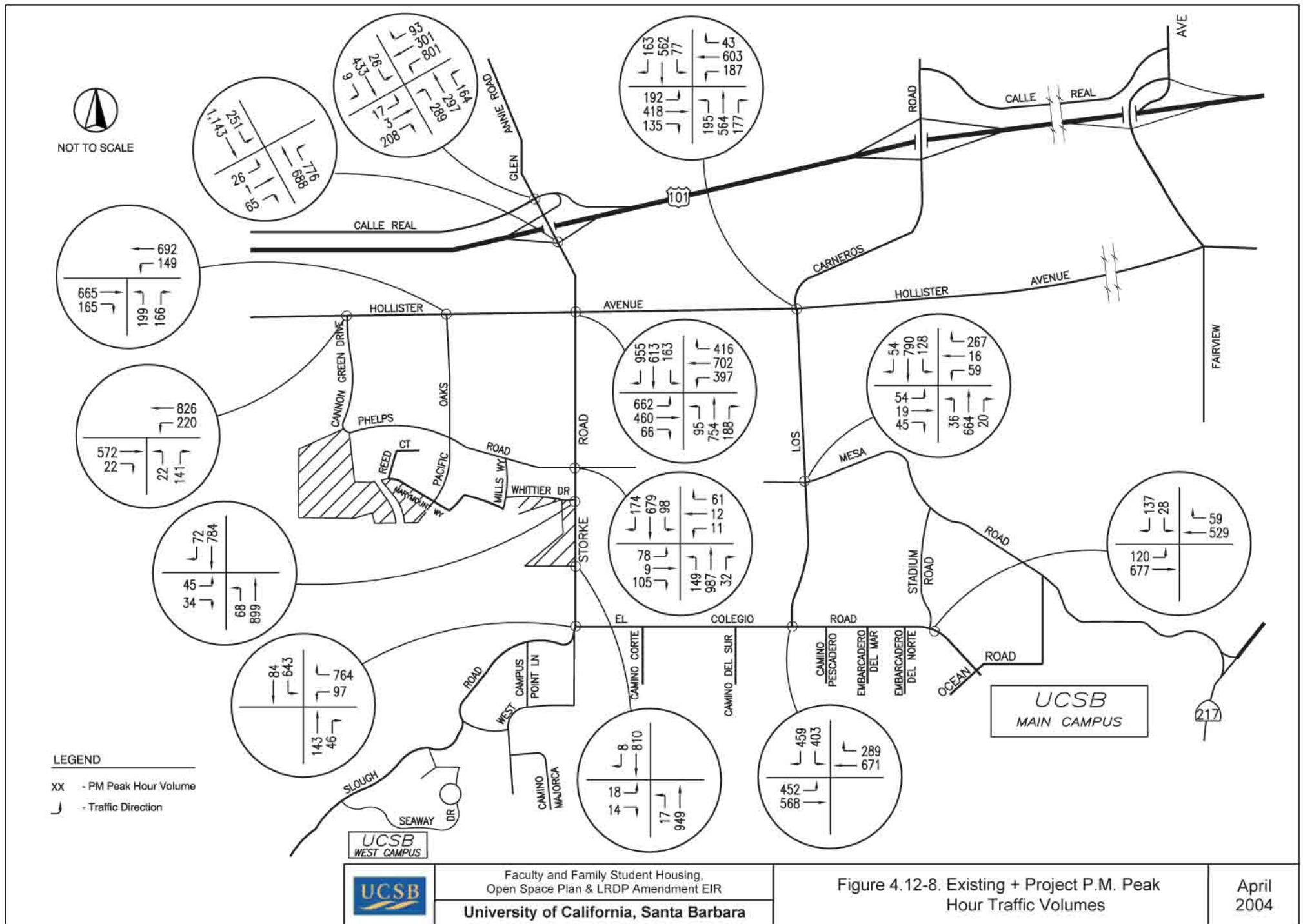
UCSB
WEST CAMPUS



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

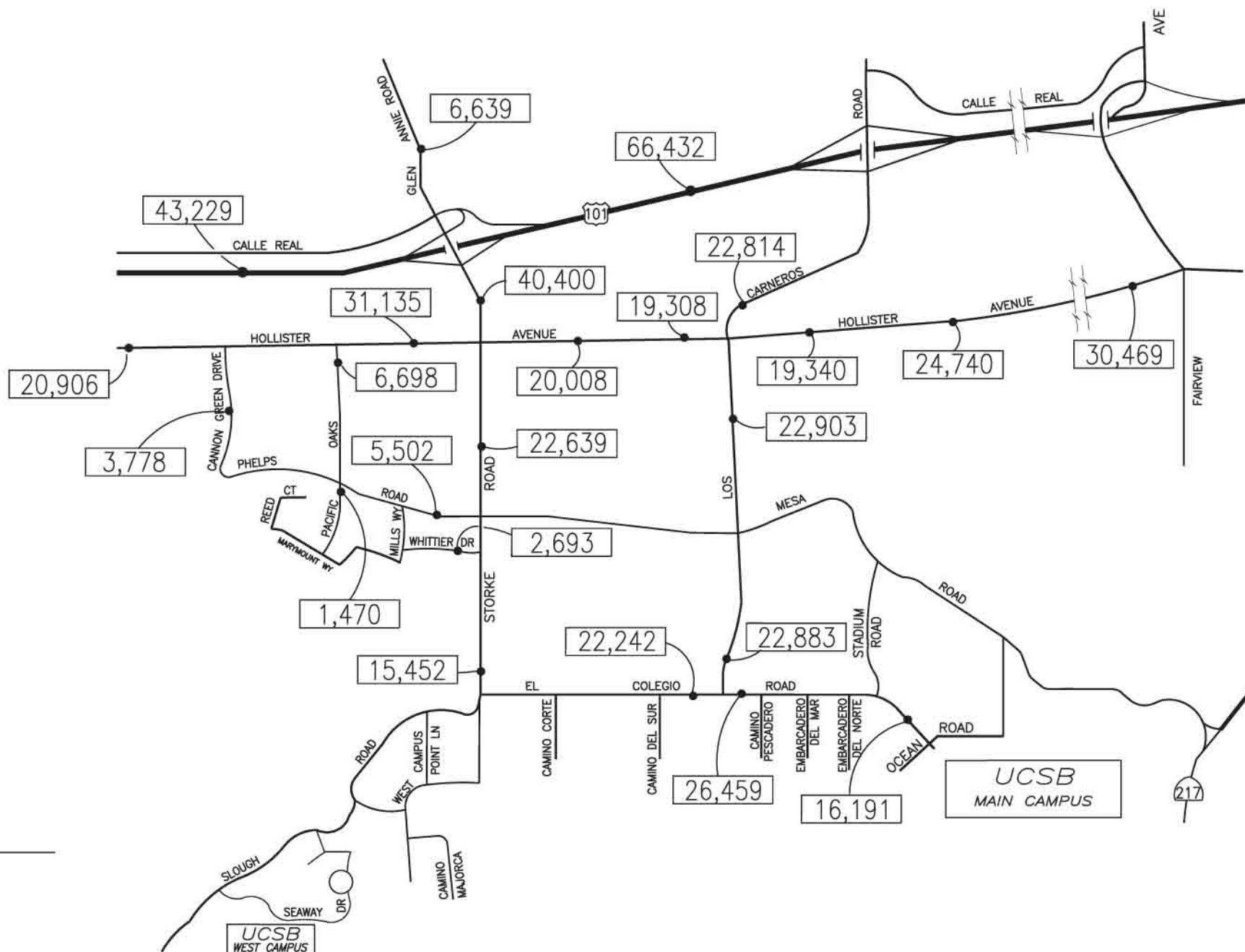
Figure 4.12-7. Existing + Project Average
Daily Traffic Volumes

April
2004





NOT TO SCALE



LEGEND

ADT



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

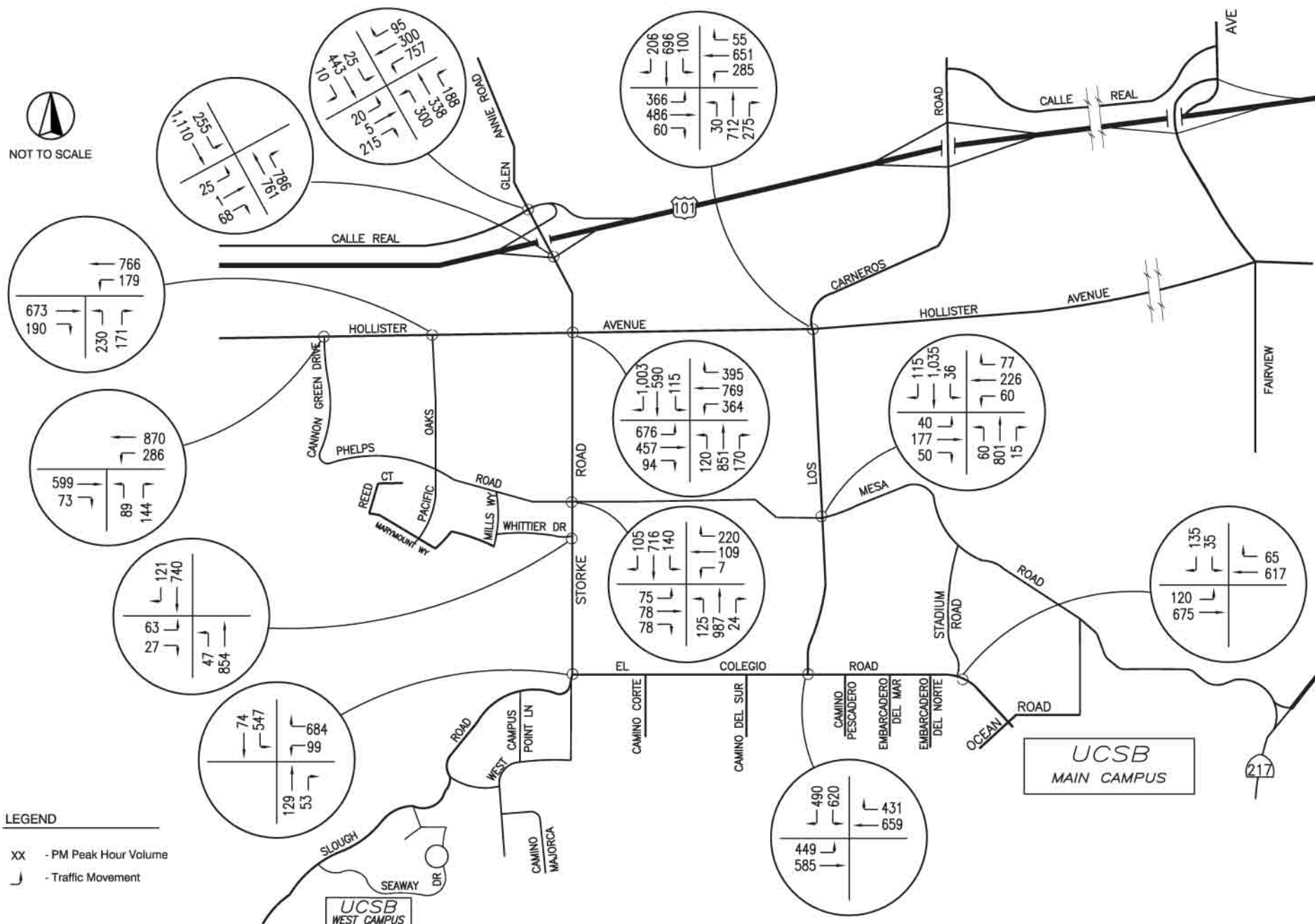
Figure 4.12-9. Cumulative Average
Daily Traffic Volumes

April
2004



LEGEND

- XX - PM Peak Hour Volume
- ↷ - Traffic Movement



UCSB
WEST CAMPUS



Faculty and Family Student Housing,
Open Space Plan & LRDP Amendment EIR
University of California, Santa Barbara

Figure 4.12-10. Cumulative P.M. Peak
Hour Traffic Volumes

April
2004



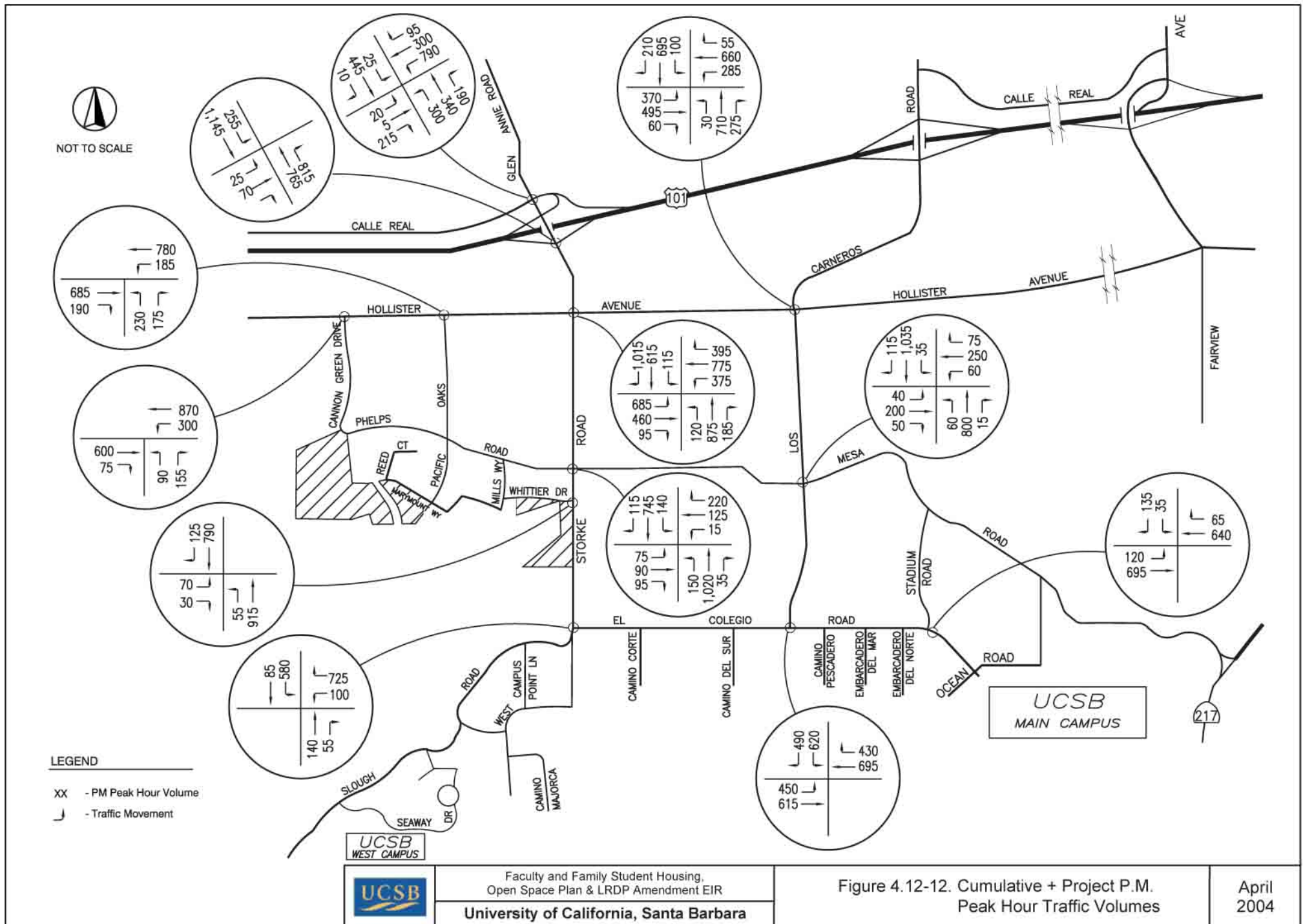
ADT



Faculty and Family Student Housing
and Open Space Plan EIR
University of California, Santa Barbara

Figure 4.12-11. Cumulative + Project
Average Daily Traffic Volumes

April
2004



FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

segment between Mesa Road and El Colegio Road (a 0.02% increase). The project would thus not generate significant project-specific impacts to Los Carneros Road.

Section 4.12

Traffic and
Circulation

Storke Road south of Whittier Drive. The existing volumes (15,800 ADT) and existing + project volumes (16,788 ADT) on the two-lane segment of Storke Road south of Whittier Drive exceeds the acceptable capacity standard. The project would add 988 ADT to the two-lane segment, increasing volumes by about 6%. This increase would result in a significant but mitigable impact (Class II). A mitigation developed for this roadway segment is provided in the Mitigation Measures section.

Storke Road north of Hollister Avenue. The existing volumes (40,000 ADT) and existing + project volumes (41,500 ADT) on the four-lane segment of Storke Road north of Hollister Avenue exceed the acceptable capacity standard (acceptable capacity < 34,000 ADT). The project would add 1,500 ADT to this segment, increasing volumes by about 4 percent. Widening Storke Road to 6 lanes would be required to mitigate this impact. This widening (over the SR-101 freeway) is not funded or programmed, thus the impact is considered (significant and unavoidable).

Intersection Impacts

Levels of service were calculated for the study-area intersections assuming the existing + project P.M. peak hour traffic forecasts illustrated in Figure 4.12-8. Table 4.12-6 shows existing + project P.M. peak hour levels of service for the study-area intersections and identifies the significance of the project's traffic additions.

The level of service results shown in Table 4.12-5 indicate that the project would generate a project -specific impact at two intersections. The Storke Road/Hollister Avenue intersection is forecast to operate at LOS D. The project would add 106 peak hour trips, which exceeds the project-specific impact threshold of 15 trips. The project would therefore generate a Class II impact (significant but mitigable) at this intersection. The Los Carneros Road/El Colegio Road intersection operates at LOS F and the project would add 113 P.M. peak hour trips, which exceeds the project-specific impact threshold of 5 peak hour trips. The project would generate significant impact at this intersection, however MM 4.12-1(c) would reduce this impact to a *less-than-significant* level.

The North Campus Family Student Housing Site would gain access from Storke Road at the existing connection that serves the existing UCSB Storke Apartments complex. This intersection would operate at LOS F with future traffic and the proposed configuration, resulting in a significant but mitigable impact. The operations of the roadway's connection to Storke Road was analyzed assuming cumulative + project P.M. peak hour traffic volumes to assess operation at the intersection. The plan for the North Campus Family Student Housing site shows that two inbound lanes and two outbound lanes would be provided at the intersection. The westbound approach serves the UCSB Francisco Torres parking lot. The operation of this intersection is forecast at LOS F during the P.M. peak hour period under cumulative + project conditions. The

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 poor operation is due to the single lane southbound on Storke Road. LOS C operations would
Traffic and be provided with if Storke Road is widened to include two southbound lanes.
Circulation

Table 4.12-6. Existing + Project P.M. Peak Hour Intersection Levels of Service

Intersection	Existing V/C/LOS	Ex. + Project V/C/LOS	V/C Increase or Trips	Impact
Hollister Avenue/Cannon Green Drive	11.2 sec/LOS B ¹	11.5 sec/LOS B ¹	N/A	No
Hollister Avenue/Pacific Oaks Road	0.56/LOS A	0.57/LOS A	0.007	No
Storke Road/U.S. 101 NB Ramps	0.59/LOS A	0.60/LOS A	0.008	No
Storke Road/U.S. 101 SB Ramps	0.49/LOS A	0.50/LOS A	0.013	No
Storke Road/Hollister Avenue	0.84/LOS D	0.84/LOS D	106 trips	Yes
Storke Road/Phelps Road	0.56/LOS A	0.58/LOS A	0.016	No
Storke Road/Whittier Drive	16.6 sec/LOS C ¹	18.7 sec/LOS C ¹	N/A	No
Storke Road/El Colegio Road	0.43/LOS A	0.45/LOS A	0.026	No
Los Carneros Road/Hollister Avenue	0.64/LOS B	0.65/LOS B	0.003	No
Los Carneros Road/Mesa Road	0.80/LOS C	0.80/LOS C	0.000	No
Los Carneros Road/El Colegio Road	1.02/LOS F	1.05/LOS F	113 Trips	Yes
Stadium Road/El Colegio Road	0.57/LOS A	0.61/LOS B	0.035	No

¹ V/C ratio not applicable for stop-sign controlled intersections. LOS based on average vehicle delay.

Bolded values exceed the Santa Barbara County impact thresholds.

MM 4.12-1(a). Modify the two-lane roadway section of El Colegio Road between Stadium Road on the east and Camino Corto Lane on the west, with a series of roundabouts at Camino Del Sur, Los Carneros Road, Camino Pescadero, Embarcadero Del Mar, Embarcadero Del Norte, and Stadium Road. Each roundabout would be designed to accommodate a truck with a 50-foot wheelbase, and each roundabout center island would provide an area for landscaping. The roundabout at Los Carneros Road would have two lanes approaching from each of the three legs. The Camino Pescadero and Embarcadero Del Mar roundabouts would have a single lane approaching, circulating, and exiting the roundabout from every direction. The Embarcadero Del Norte roundabout would have one northbound lane approaching from Isla Vista, two westbound lanes approaching from UCSB, and two eastbound approach lanes. The roundabout at Stadium Road would have a single approaching, circulating, and exiting lane.

MM 4.12-1(b). The City of Goleta and the County of Santa Barbara have reviewed the improvements required for this roadway and determined that the west side of Storke Road will

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

need to be widened from Whittier Drive to El Colegio (adjacent to the Ocean Meadows Golf Course and the UCSB West Campus Apartments) to provide two southbound lanes, bike lanes, sidewalks and a raised median with left-turn pockets.

Section 4.12

*Traffic and
Circulation*

MM 4.12-1(c). Three mitigation options have been developed for the project-specific impact at the Storke Road/Hollister Avenue intersection.

i). One of the operational constraints at the Storke Road/Hollister Avenue intersection is the lack of a westbound merge lane for the heavy right-turn movement from southbound Storke Road onto westbound Hollister Avenue. Vehicles traveling southbound on Storke Road turning right onto Hollister Avenue are at times delayed at the yield sign waiting for gaps in the westbound traffic stream on Hollister Avenue. These vehicles form queues that back-up onto Storke Road and affect the southbound through movements at the traffic signal. Providing a merge lane in front of the service station on this corner of the intersection would allow the vehicles to turn onto Hollister Avenue without being delayed by the through traffic.

ii). The GTIP includes an improvement for the intersection that involves adding a third eastbound left-turn lane. The GTIP improvement would also require adding a third lane on Storke Road northbound from Hollister Avenue to the U.S. 101 southbound ramp intersection. There are currently two northbound lanes on Storke Road and the third lane would be required to accept the traffic from the three eastbound left-turn lanes on Hollister Avenue. Implementation of the third left-turn would also require widening of Hollister Avenue adjacent to the Camino Real Marketplace site, which would require additional right-of-way from adjacent properties. The intersection's operation would be improved to LOS C (V/C 0.77/LOS C) with this improvement.

iii). The 1997 GTIP also include a project to add a third westbound through lane at the Storke Road/Hollister Avenue intersection. Adding a third westbound through lane (instead of the third eastbound left-turn lane) would improve the intersection operation to LOS C (V/C 0.78/LOS C). The third westbound through lane option at the intersection would require acquisition of right-of-way from developed properties on the north side of Hollister Avenue west of Storke Road (from a gas station and a recently constructed office building), as well as right-of-way from a vacant parcel located east of the intersection.

MM 4.12-1(d). UCSB shall participate in the "fair share" funding of improvements to Storke Road and the Storke Road/Hollister Avenue intersection, meaning the University will negotiate with the City of Goleta and the County of Santa Barbara as appropriate for a contribution to the upgrade pursuant to procedures similar to those described in Government Code 54999 et seq. for contributions to utilities. In addition, the University will pay its fair share only if the City of Goleta and the County of Santa Barbara have established a mechanism to collect funds from other developers or entities that are contributing to traffic impacts and implements the proposed road or intersection improvements.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Section 4.12 With implementation of MMs 4.12-1(a) through 4.12-1(d), the proposed project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, and this impact would be reduced to a *less-than-significant* level.

Traffic and Circulation

Impact 4.12-2. Project implementation would result in the generation of construction-related vehicle trips, which could temporarily impact traffic conditions along roadway segments and at individual intersections. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would result in additional vehicular trips during construction that would increase traffic volumes on the local street and highway network and could degrade intersection levels of service.

The proposed project would include construction of 236 units of faculty housing on the North Parcel and 151 units of family student housing on the Storke-Whittier Parcel, which would result in the generation of construction-related vehicle trips over the approximately two-year construction period for the housing. Implementation of the portion of the Open Space Plan under the University's jurisdiction would result in coastal access improvements, including (1) improvement of approximately 8.18 miles of existing trails, (2) improvement of three existing beach access points, (3) installation of one new coastal access stairway, (4) provision of up to 84 public parking spaces at four locations, and (5) replacement of an existing portable restroom at Coal Oil Point. In addition, sensitive coastal resources in open space areas would be managed, including restoration of degraded habitat. Trail improvements, beach access improvements, development of new public parking lots, and improvements to degraded habitat could result in vehicle trips associated with the construction of those facilities.

Construction of buildings and facilities could involve clearance and grading of the site, delivery of building materials, and trips associated with construction workers. As noted in the project description, grading of the North Parcel and the Storke-Whittier Parcel is not anticipated to result in the export (or import) of earth materials, and thus no construction trips during grading of the residential areas would be limited to the arrival and departure of construction vehicles and construction workers. In general, the periods of heaviest construction vehicle traffic would be during the framing of residential structures, when the delivery of construction materials and the number of construction workers is likely to be the greatest. With approximately 365,500 gsf of building area on the North Parcel (constructed in up to five phases), and approximately 229,740 gsf of building area on the Storke-Whittier Parcel, the simultaneous construction of both projects could result in approximately 20 deliveries of construction materials each day (10 for each site), resulting in approximately 40 construction truck trips per day. With each construction truck trip equivalent to approximately 2.5 vehicle trips (due to the length of the truck), 20 deliveries of construction materials could result in approximately 100 vehicle-equivalent trips per day. Concurrently, an estimated 40 construction workers could be present on the two sites, generating an additional 80 trips per day (assuming one single inbound and outbound trip per worker). Thus, during peak construction activity on the residential parcels, approximately 180 trips per day could be generated.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Section 4.12

Traffic and
Circulation

Construction traffic associated with coastal access improvements, management of open space, and restoration of habitat is anticipated to vary considerably. As it is anticipated that individual trail segments would be improved separately, and that other coastal access improvements (e.g., boardwalks, or parking lots) and construction trips associated with open space management and improvements would be considerably less than those associated with residential development. In general, it is anticipated that improvements of trails or construction of public parking lots would generate the greatest levels of construction traffic associated with the open space areas; however, due to the small areas being improved at one time, no more than 10 to 15 construction workers would be needed on any given day, and trips associated with such development is unlikely to exceed 20 to 30 trips per day, especially given the fact that the parking at Coal Oil Point would be closed from dusk to dawn.

If both residential projects were developed concurrently with trail improvements, a combined total of approximately 210 construction trips per day could result. The addition of approximately 210 trips per day is not anticipated to result in any substantial degradation of intersection volumes at any location in the vicinity of the project area, given existing traffic volumes and levels of service, as identified in Table 4.12-1. Because of the typical hours of construction (e.g., 7 A.M. to 3:30 P.M.), most trips associated with construction workers would not affect P.M. peak hour traffic conditions. In addition, trips associated with delivery of construction materials are anticipated to occur throughout the typical construction day, and would be completed prior to the P.M. peak traffic hour.

Construction trips resulting from either residential development or open space improvements would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, and this impact would be *less than significant*.

Impact 4.12-3. Project implementation would result in additional vehicular traffic volumes, which may exceed established service levels on roadways designated by the Santa Barbara County Congestion Management Program. With implementation of the identified mitigation measure, the impact would be reduced to a *less-than-significant* level.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would result in additional vehicular trips that could exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways.

One of the project's basic objectives is to provide housing on campus in order to support closer linkages between residential and academic functions and reduce the number and length of vehicle trips associated with commuting. The proposed project would also be consistent with LRDP Policies 30210.15 and 30211.1 by providing and improving bicycle and pedestrian access ways to the beach, and including improvements to access roads to ensure that new motor vehicle traffic generated by the new development would not restrict or impede public access to or along the coast. However, as noted above, the project, as a conservative estimate, would add

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12

**Traffic and
Circulation**

approximately 3,396 ADT to the study-area roadways. The operational characteristics of the roadway segments within the study-area were analyzed assuming the existing + project ADT volumes presented in Figure 4.12-7. Based on the County's roadway design capacities, it was determined that the most of the roadway segments in the study area would continue to operate acceptably at LOS C or better with existing + project ADT volumes. The threshold used to determine roadway impacts for segments exceeding the County's acceptable capacity rating or design capacity is a minimum traffic volume increase of 1.0%. As discussed under Impact 4.12-1, the existing traffic volumes on the segments of El Colegio Road located east and west of Los Carneros currently exceed the County's roadway design capacity for a two-lane arterial roadway. The project would add 603 ADT and 683 ADT on El Colegio Road east and west of Los Carneros Road respectively, increasing the ADT volumes on these segments by approximately 3%. The existing volumes (15,800 ADT) and existing + project volumes (16,791 ADT) on the two-lane segment of Storke Road south of Whittier Drive exceed the County's LOS C standard. The project would add 988 ADT to the two-lane segment, increasing volumes by about 6%. Implementation of MM 4.12-1(a) would improve traffic conditions to LOS C, which is consistent with the CMP threshold.

With implementation of MM 4.12-1(a), the proposed project would not result in additional vehicular traffic volumes that exceed established service levels on roadways designated by the Santa Barbara County Congestion Management Program, and this impact would be reduced to a *less-than-significant* level.

Impact 4.12-4. Implementation of the proposed project would not result in vehicular hazards due to design features or land use incompatibilities. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would include new vehicular circulation elements, which would not include hazards due to design features or incompatible land uses.

It is anticipated that any new roadway segments would employ the use of standard engineering practices (e.g., use of standard road and driveway widths, provision of adequate sight lines, and avoidance of sharp turning radii) and traffic mitigation strategies (e.g., installation of control devices such as stop signs or signal lights as needed) to avoid design elements that could result in hazards due to features such as sharp curves or dangerous intersections.

The proposed project would include residential development in proximity to existing residential development (e.g., north of Phelps Road and Marymount Way, east of Storke Road and the existing West Campus Student Family Housing complex) and thus would not result in traffic hazards related to land use incompatibilities.

With the inclusion of standard engineering practices related to roadway design and traffic control measures, the proposed project would not substantially increase hazards due to a design feature or incompatible uses, and this impact would be *less than significant*.

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Impact 4.12-5. Implementation of the proposed project would not result in pedestrian hazards due to design features or land use incompatibilities. This impact would be *less than significant*.

Section 4.12

**Traffic and
Circulation**

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would increase traffic on local streets and modify pedestrian access routes, which could pose hazards to pedestrians.

The proposed project would include development of 236 units of faculty housing on the North Parcel and 151 units of family student housing on the Storke-Whittier Parcel. Implementation of the portion of the Open Space Plan under the University's jurisdiction would result in coastal access improvements, including (1) improvement of approximately 8.18 miles of existing trails, (2) improvement of three existing beach access points, (3) installation of one new coastal access stairway, (4) provision of up to 84 public parking spaces at four locations, and (5) replacement of an existing portable restroom at Coal Oil Point. The development of residential facilities and improvements to coastal access could increase vehicular traffic in the project vicinity, as discussed in Impact 4.12-1 above. Installation of sidewalks and improvement of trails could pose hazards to pedestrians.

As discussed in the existing conditions, the majority of the streets surrounding the project area have been constructed with curb, gutter, and sidewalks. Several roadway sections are not fully improved. This includes portions of the south sides of Phelps Road and Marymount Way, which do not contain sidewalks, and the portion of the east side of Storke Road adjacent to the Storke Ranch development, which includes a decomposed granite path.

The project-specific approvals would result in development of 387 housing units within the North Campus, including 236 units of faculty housing on the North Parcel and 151 units of family student housing on the Storke Whittier site. This development would increase vehicular circulation on local roadways, including Phelps Road, Marymount Way, and Storke Road, portions of which are not fully improved with sidewalks on both sides of the roadway. However, on these streets, sidewalks exist on at least one side of the street, such that they are accessible to pedestrians.

The portion of Phelps Road that does not have a sidewalk is on the south side of the roadway between Pacific Oaks Road and Storke Road. Pedestrians currently must use the sidewalk on the north portion of this segment of the roadway, necessitating that they cross Phelps Road from the south to the north side at the intersection of Phelps Road with Pacific Oaks Road and/or Storke Road, depending on their route of travel. The Phelps/Pacific Oaks intersection is controlled by stop signs. The Storke/Phelps Intersection is controlled by a signal. These existing traffic control measures ensure safe crossing of pedestrians at these intersections in order to access sidewalks. Additional traffic on the roadways may result in slightly longer delays for pedestrians prior to crossing the street. However, existing traffic control measures and the

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Section 4.12 provision of sidewalks on at least one side of the roadway would continue to ensure safe pedestrian use of Phelps Road.

Traffic and Circulation

The portion of Marymount Way that does not have a sidewalk is on the south side of the roadway in the area adjacent to the faculty housing site. The existing vacant faculty housing site is located south of this roadway, and existing residential uses are located north of the roadway. Therefore, the existing sidewalk on the north side of the street is appropriate to serve existing pedestrian circulation. Pedestrians that would exit onto Marymount Way from the proposed faculty housing development would need to cross Marymount in order to use existing sidewalks. Marymount Way is a two-lane local street that serves a limited portion of the Ellwood area and is not heavily traveled by vehicles. Due to light traffic volumes on this street, pedestrian crossing and use of the shoulder on the south side of this street roadway would not create significant pedestrian hazards.

A portion of the east side of Storke Road adjacent to the Storke Ranch development includes a decomposed granite path. However, grade separated areas are provided for pedestrians along both sides of the street. Therefore, hazards would not result due to additional pedestrian traffic generated by the proposed project.

The Open Space Plan proposes closure of a number of trails and formalization of others in the Plan area. The majority of pedestrian trails proposed (Figure 3-6) would be off-road and separated from the street. Class II bike lanes are proposed on some of the major thoroughfares in the area, including Hollister, Storke, Slough, and Phelps Roads. Class II bike lanes are intended for cyclists, and are paved bike lanes adjacent to roadways. Due to the location of trails in open space areas, away from vehicular traffic, use of these trails would not result in hazards to pedestrians.

The project-specific development approvals, including the development of new public coastal access parking would result in increased pedestrian activity in the area. Existing sidewalks and pathways that currently provide safe pedestrian circulation in the area would continue to do so with the development of the proposed project. The provision of additional public parking at Coal Oil Point could increase vehicular traffic on Devereux Road, which is narrow and winding and used by pedestrians and joggers. Provision of up to 20 parking spaces at Coal Oil Point could generate approximately 93 vehicle trips per day, based on a generation rate of 4.65 trips per space. Given existing traffic on the road (associated with the Devereux School, the West Campus Point faculty housing, the Orfalea' Children's Center, and visitors the COPR and Cliff House, the addition of up to 93 vehicle trips is not anticipated to result in any substantial hazards to pedestrian safety, as it is assumed that the trips would be spread over a typical day. In addition all vehicles on Devereux Road would continue to be subject to the posted speed limit of 15 MPH.

The proposed project would not result in any features that would pose hazards to pedestrians, and this impact would be *less than significant*.

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Impact 4.12-6. Project construction could result in short-term vehicular hazards due to closure of traffic lanes or roadway segments. With implementation of the identified mitigation measure, this impact would be reduced to a *less-than-significant* level.

Section 4.12

Traffic and
Circulation

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would result in construction activity that could require the short-term closure of traffic lanes or roadway segments, which could result in short-term traffic hazards.

Development of 236 units of faculty housing on the North Parcel would result in construction on approximately 27 acres. The Sierra Madre family student housing would develop 10 acres of the Storke-Whittier Parcel, plus an additional 3 acres immediately east of the existing West Campus Student Family Housing (on a big lawn area). Construction within these areas could impact adjacent streets during the delivery of construction materials, installation or extension of utilities, or the installation of street or pedestrian improvements.

To reduce potential hazards associated with street closures, MM 4.12-6 would require maintenance of a single traffic lane at all times, and signal carriers during such periods.

MM 4.12-6. Maintain at least one unobstructed lane in both directions on all campus and public roadways. At any time when only a single lane is available, provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. An encroachment permit from the City of Goleta may be required.

With implementation of MM 4.12-6, construction of the proposed project would not result in significant short-term traffic hazards due to lane closures, and this impact would be reduced to a *less-than-significant* level.

Impact 4.12-7. Project construction would not substantially increase pedestrian hazards due to closure of sidewalks or pedestrian paths. ~~This is considered a less than significant impact. With implementation of the identified mitigation measure, this impact would be reduced to a less-than-significant level.~~

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, could result in short-term hazards to pedestrians during construction.

Construction activities during project implementation, including residential development, coastal access improvements, and habitat restoration could result in temporary closure of pedestrian sidewalks and paths or the provision of temporary pedestrian routes. The arrival or departure of construction vehicles and delivery of construction materials could intermittently disrupt pedestrian travel along pedestrian routes adjacent to construction sites.

MM 4.12-7 would require the provision of alternative pedestrian routes and ensure such routes are accessible.

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 **MM 4.12-7.** For any construction-related closure of pedestrian routes, signage shall be provided indicating alternative routes. Where necessary, provide curb cuts and street crossings to ensure that alternate routes are accessible.

Traffic and Circulation

With the implementation of MM 4.12-7, construction of the proposed project would not result in significant short-term pedestrian hazards due to closure of sidewalks, and this impact would be reduced to a *less-than-significant* level.

Impact 4.12-8. Project implementation would not impair emergency access in the long term. ~~This is considered a less-than-significant impact.~~ This impact would be less than significant.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would result in additional vehicular trips that would increase traffic volumes on the local street and highway network and degrade intersection levels of service; however, any such degradation of levels of service would not impair access by emergency vehicles in the long term.

As shown on the site plan (see Figure 3-2, Project Description), primary access to the North Campus Faculty Housing site would be provided via a 28-foot connector roadway extending south from the current terminus of Canon Green Drive at Phelps Road. This roadway would connect to the site's principal east/west roadway, which would be 30 feet wide. This east/west roadway would provide access to most of the housing blocks through a series of smaller neighborhood streets and driveway connections. Both of these connector streets would accommodate two-way traffic with parking allowed on one side of the street.

Secondary access to the North Campus Faculty Housing site would be provided via a roadway connection to the western terminus of Marymount Drive. An internal roadway connection may be provided between these two areas via a bridge over the Phelps Ditch. It is recommended that the bridge be constructed with a minimum width of 20 feet to accommodate two-way flow and facilitate emergency access.

Three clusters of housing are located in the eastern portion of this parcel adjacent to Marymount Way. These units would be accessed by several driveways proposed on Marymount Way. The southern side of Marymount Way adjacent to this site is currently undeveloped and should be improved to County standards including the construction of curb, gutter, and sidewalk.

The overall circulation plan shows that the internal thoroughfares are scaled to accommodate two-way traffic, but are narrower than typically provided to accommodate vehicles and bicyclists using the roadways. As proposed in the plan, parking would need to be restricted to one side of the roadway on the 30-foot and 28-foot roadways, and parking would be prohibited on the 24-foot roadways.

The site plan shows an island in the new Phelps Road/Canon Green Drive intersection. The intersection design will need to be reviewed to ensure that truck movements (garbage trucks and moving trucks) can enter and exit the site via the intersection.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Site Access & Circulation

Section 4.12

Traffic and
Circulation

As shown on the site plan (Figure 3-4), three parking fields are provided for the North Campus Family Student Housing project component; one located at the southwest corner of Storke Road/Whittier Drive, one located on the west side of Storke Road south of the Storke Road/Whittier Drive intersection, and one located just north of the existing roadways that serves the existing UCSB Storke Apartments.

Access to the parking lot located at the southwest corner of Storke Road/Whittier Drive is proposed via one driveway on Storke Road and via one driveway on Whittier Drive. The driveway on Storke Road would be limited to right-turns only by the raised median on Storke Road. The driveway on Whittier Drive would be full access. These driveways would adequately accommodate the volumes generated by this portion of the project.

Access to the parking lot located on the west side of Storke Road south of the Storke Road/Whittier Drive intersection is proposed via one driveway on Storke Road and one driveway on the existing roadway that extends westerly from Storke Road between the existing UCSB Storke Apartments complex and the new housing complex. The driveway on Storke Road would be limited to right-turns only by the raised median on Storke Road. The driveway on the existing Storke Apartments roadway would provide full access to Storke Road. Access to the third parking lot would be provided via a connection to the existing roadway serving the UCSB Storke Apartments site. As discussed in Impact 4.12-1, development of 236 units of faculty housing and 151 units of family student housing, improvement of coastal access, and management of open space, including restoration of degraded habitat, result in the generation of additional vehicle trips, which would degrade levels of service at selected intersections in the project vicinity. As noted in Impact 4.12-1, most intersections in the project vicinity would continue to operate at acceptable levels of service. On these road segments, emergency vehicles will be able to traverse these roadways and intersections relatively impeded. Even for those intersections where the future LOS would be at level D, traffic would continue to move along those roadways, albeit with significant delays. In such traffic conditions, emergency vehicles can, and do, traverse such roadways, generally by requiring vehicles to move over in order for the emergency vehicles to pass through. On some limited occasions, because of extended congestion, emergency vehicles may be required to cross to opposing traffic lanes (e.g., to travel westbound in eastbound traffic lanes), or use the median or a bicycle lane to get around congested road segments or intersections. Thus, emergency vehicles are not anticipated to experience any substantial delays as a result of the significant and unavoidable traffic impacts that would occur at one intersection as a result of implementation of the proposed project.

Implementation of the proposed project would not impair emergency access in the long term, and this impact would be *less than significant*.

Impact 4.12-9. Project construction could impair emergency access during the short term. With implementation of the identified mitigation measure, this impact would be reduced to a less-than-significant level.

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would result in additional vehicular trips during construction that would increase traffic volumes on the local street and highway network and could degrade intersection levels of service, which could impair access by emergency vehicles in the short term. In addition, roadway closures, which may be required during construction, could impede emergency access.

Traffic and Circulation

As discussed above under Impact 4.12-2, during construction of project elements, approximately 210 vehicle trips per day could be generated by the simultaneous construction of faculty housing, family student housing, and trail improvements. Any such short-term increases in traffic associated with construction vehicles and construction workers would not result in any substantial increases in traffic volumes on any roadways in the project vicinity. Thus, construction-related vehicular traffic would not impair access by emergency vehicles.

Although not anticipated, if roadways in the vicinity of the project are closed due to construction activities, such as installation or extension of utilities or other infrastructure, emergency access could be impaired by the street closure.

MM 4.12-9 would require notification of emergency service providers in the event of any project-related street closures.

MM 4.12-9. To ensure adequate access for emergency vehicles when construction projects would result in roadway closures, the Office of Design, Construction, and Physical Facilities shall consult with the University Police Department and the SBFD to disclose roadway closures and identify alternative travel routes.

With implementation of MM 4.12-9, construction of the proposed project would not impair emergency access in the short term, and this impact would be reduced to a *less-than-significant* level.

Impact 4.12-10. Project implementation would not result in inadequate parking capacity. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, result in additional vehicular trips that would increase traffic volumes on the local street and highway network and degrade intersection levels of service.

As stated earlier, MM 4.12-1(a) would improve traffic flow through the provision of bicycle lane improvements, and MM 4.12-1(b) would ensure implementation of a Transportation Demand Management Program to divert at least 10 percent of all passenger trips to and from campus to alternatives modes. Implementation of these mitigation measures that reduce number of vehicle trips would, in turn, reduce parking demand.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Section 4.12

Traffic and
Circulation

For the 236 units of faculty housing, 472 spaces of off-street parking would be provided, with approximately 85 spaces of on-street parking would be available for visitors, for a total parking amount of approximately 557 spaces, or approximately 2.36 spaces per unit. This parking supply would adequately accommodate the parking demands generated by the project. For the 151 units of family student housing, a total of 552 parking spaces would be provided, 219 of which would replace existing parking for the adjacent West Campus Apartments that would be removed during construction, with 333 net new spaces to serve the new housing. The proposed parking supply of approximately 2 spaces per unit would satisfy the project's parking demands based on parking demand rates presented in the Institute of Transportation Engineers (ITE) parking generation report.

Up to 72 public parking spaces would be provided at up to four locations: at the western terminus of Phelps Road (near the terminus of Trail No. 12); off of Devereux Road (south of Cameron Hall); at Coal Oil Point (in addition to the existing permit-only parking lot); or west of Camino Majorca near the border of the West Campus with the community of Isla Vista (and the terminus of Trail No. 1). Consistent with LRDP policy 30210.7, the proposed parking would limit public parking at Coal Oil Point to 50 spaces. In addition, MM 4.10-1(e) would ensure that visitors could use parking facilities on campus, including the new parking facilities proposed as part of the project. With visitor parking available on campus, and the addition of up to 72 additional coastal access parking spaces, parking for recreational users of the open space areas and the adjacent beaches would be adequate to serve anticipated demand.

Implementation of the proposed project would not result in inadequate parking capacity, and this impact would be *less than significant*.

Impact 4.12-11. Project construction could require additional temporary parking for construction workers. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would require short-term parking for construction workers.

As discussed in Impact 4.12-2, during construction of the residential structures, an estimated maximum of 40 construction workers could be present on the two sites. Improvements of trails or construction of public parking lots would involve no more than 10 to 15 construction workers, for a total number of approximately 55 construction workers during construction phases. Given the area affected by residential development (with 23 acres for the faculty housing on the North Parcel and 13.5 acres for the family student housing [10.7 acres on the Storke-Whittier Parcel and 2.8 acres of existing lawn area adjacent to the West Campus Family Student Housing complex]), it is anticipated that sufficient area would be available to provide on-site parking within the areas subject to residential development. Parking for 10 to 15 construction workers associated with coastal access improvements could be accommodated within existing parking areas on the West Campus (e.g., the existing dirt lot south of Cameron Hall), or via permit, within the parking lot at Coal Oil Point.

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 Construction of the proposed project would not result in inadequate parking capacity and this impact would be *less than significant*.
Traffic and Circulation

Impact 4.12-12. Project implementation would not conflict with applicable policies, plans, or programs supporting alternative transportation. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, would not conflict with applicable policies, plans, or programs supporting alternative transportation.

The development of both faculty housing and student housing in a location close to campus would facilitate the use of alternative modes of travel to the campus, and is one of the fundamental objectives of the project. Both faculty and student family housing would be located in areas that would allow bicycle commute to the campus, as these residential uses would be located adjacent to Class II bike lanes and are within several miles of the main campus. Student family housing would be adjacent to bus stop facilities, and faculty housing would be located in close proximity to bus service provided at the Camino Real Marketplace. Project development would place faculty and students in locations that are closer in proximity to the campus than where they could locate otherwise in Goleta, Santa Barbara, or the County, and would, therefore, serve as a strategy to reduce long distance vehicular trips to and from the campus.

Implementation of the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation, and this impact would be *less than significant*.

For additional discussion of the project's consistency with local plans, refer to Section 4.6 (Land Use).

Impact 4.12-13. Project implementation would not substantially increase demand for public transit. This impact would be *less than significant*.

Amendment of the LRDP to permit residential development on the North Campus, coastal access improvements, and open space management activities, including habitat restoration, could increase the on-site residential population and increase recreational use of open space areas, which could contribute to increased demand for public transit.

As discussed in the Existing Conditions section, the North Campus is served by several transit lines operated by the MTD, with bus stops located on the east and west side of Storke Road opposite Whittier Drive. Connections are available between the site and the University Main Campus, downtown Goleta, and western Goleta, as well as downtown Santa Barbara (including the main downtown transit center). Service is provided seven days per week with frequent headways. As such, adequate transit facilities serve the site.

The proposed project would add approximately 1,003 persons to the area, with 612 persons in the faculty housing and 391 persons in the family student housing. The increase in the local

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

population would increase demands for public transit. Only a portion of the total population would be anticipated to use transit facilities, since on-site parking (including visitor parking) would be provided at a ratio of approximately 2.19 spaces per unit. Students living in the Sierra Madre housing would be anticipated to use transit at a relatively higher proportion than the faculty, based on the lower percentage of main campus permits that are allocated to students.

Section 4.12
Traffic and
Circulation

As existing transit facilities, which serve the site on a regular basis and connect to key destinations in the area could adequately serve demands from proposed development, the proposed project would not substantially increase demands for transit service, and this impact would be *less than significant*.

4.12.5 Cumulative Impacts

The cumulative analysis reviewed in this section is based on traffic forecasts generated by the Goleta Traffic Model. The Goleta Traffic Model was calibrated in November 2003 and then used to forecast future traffic volumes assuming the approved and pending developments in the Goleta area. The cumulative model includes projects within the City of Goleta, as well as projects located in the County areas, the City of Santa Barbara, and UCSB. Listings of the cumulative development projects are included in the Technical Appendix for reference. The cumulative model also includes the extension of Phelps Road as a two-lane facility between Storke Road and Los Carneros Road.

Figures 4.12-9 and 4.12-10 present the cumulative ADT and P.M. peak hour volumes, respectively; and Figures 4.12-11 and 4.12-12 illustrate the cumulative + project volumes used to assess potential cumulative impacts generated by the project.

Cumulative Roadway Impacts

The Faculty and Family Student Housing and Open Space Plan would add 3,141 ADT to the study-area roadways under cumulative conditions, resulting in a Class II impact (significant but mitigable).

The operational characteristics of the roadway segments within the study-area were analyzed assuming the cumulative + project ADT volumes presented in Figure 4.12-11. Based on the County's adopted roadway design capacities, it was determined that most of the roadway segments in the study area would continue to operate acceptably at LOS C or better with cumulative + project ADT volumes.

The text below discusses the roadway segments that would operate below LOS C with cumulative + project volumes and identifies the significance of the project's traffic additions. The threshold used to determine roadway impacts for segments exceeding the County's acceptable capacity or design capacity ratings is a minimum traffic volume increase of 1.0%.

El Colegio Road. The segments of El Colegio Road located east and west of Los Carneros are forecast to exceed the roadway design capacity for a two-lane arterial roadway under cumulative

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12

**Traffic and
Circulation**

conditions. The project would add 441 ADT to 458 ADT to these segments under cumulative conditions, increasing the ADT volume by approximately 2%. This increase would result in a significant but mitigable impact (Class II) to El Colegio Road between Camino Corto and Stadium Road. Implementation of MM 4.12-1(a) would reduce this impact to a less-than-significant level.

Los Carneros Road. The segment of Los Carneros Road between Hollister Avenue and Mesa Road is forecast to exceed the design capacity and the segment between Mesa Road and El Colegio Road is forecast to exceed the acceptable capacity rating under cumulative conditions. The project would not add appreciable traffic to Los Carneros Road between Hollister Avenue and Mesa Road. The project would add 17 ADT to Los Carneros between Mesa Road and El Colegio Road, which represents less than 1% increase. The project would thus not generate any cumulative impacts to Los Carneros Road.

Storke Road south of Whittier Drive. The cumulative + project volumes (16,200 ADT) on the two-lane segment of Storke Road south of Whittier Drive exceed the acceptable capacity standard. The project would add 748 ADT to the two-lane segment, increasing volumes by about 4.5%. This increase would result in a significant cumulative impact, which would be mitigated by the implementation of MM 4.14-1(b), this impact would be mitigated to a less-than-significant level.

Storke Road North of Hollister Avenue. The cumulative + project volumes (41,900 ADT) on the four-lane segment of Storke Road north of Hollister Avenue exceed the acceptable capacity standard. The project would add 1,500 ADT to the four-lane segment, increasing volumes by about 4%. Widening Storke Road to 6 lanes would be required to mitigate this impact. This widening (over the SR-101 freeway) is not funded or programmed, thus this cumulative impact would be *significant and unavoidable*.

Cumulative Intersection Impacts

Cumulative development in conjunction with the proposed project would result in a significant impact during the P.M. peak hour period at the Los Carneros Road/Mesa Road intersection (LOS F conditions), assuming that Phelps Road is extended to Mesa Road. If this improvement does not occur, no cumulative impact would result. The GTIP includes a project to provide additional lanes on each of the intersection approaches. However, the GTIP improvements would not improve traffic conditions to LOS C. Improving the intersection to provide three northbound and southbound lanes (one dedicated left turn lane, one dedicated through lane, and one through and optional right turn lane), and two westbound and eastbound lanes (one dedicated left turn lane and one through and optional right turn lane) would improve traffic conditions to LOS C. The University previously committed to providing a fair share contribution to this improvement in conjunction with the proposed San Clemente Graduate Student Housing and El Colegio Road Improvement projects.

FACULTY AND FAMILY STUDENT HOUSING, OPEN SPACE PLAN, & LRDP AMENDMENT EIR

Cumulative development in conjunction with the proposed project would result in a significant impact during the P.M. peak hour period at the Los Carneros Road/El Colegio Road intersection (LOS F conditions). Implementation of MM 4.12-1(a) would reduce this cumulative impact to a *less-than-significant* level.

Section 4.12
Traffic and
Circulation

Levels of service were calculated for the study-area intersections assuming the cumulative and cumulative + project P.M. peak hour traffic forecasts illustrated in Figures 4.12-10 and 4.12-12. The level of service calculation results are shown in Table 4.12-7.

Table 4.12-7.
Cumulative and Cumulative + Project
P.M. Peak Hour Intersection Levels of Service

Intersection	Cumulative V/C / LOS	Cumulative + Project V/C / LOS	V/C Increase	Impact
Hollister Avenue/Cannon Green Dr	18.7 sec/LOS C ¹	20.3 sec/LOS C ¹	NA	No
Hollister Avenue/Pacific Oaks Road	0.61/LOS B	0.62/LOS B	0.008	No
Storke Road/U.S. 101 NB Ramps	0.60/LOS A	0.61/LOS B	0.007	No
Storke Road/U.S. 101 SB Ramps	0.51/LOS A	0.52/LOS A	0.013	No
Storke Road/Hollister Avenue	0.96/LOS E	0.97/LOS E	0.009	No
Storke Road/Phelps Road	0.75/LOS C	0.78/LOS C	0.034	No
Storke Road/Whittier Drive	21.0 sec/LOS C ¹	24.2 sec/LOS C ¹	NA	No
Storke Road/El Colegio Road	0.41/LOS A	0.43/LOS A	0.018	No
Los Carneros Road/Hollister Avenue	0.72/LOS C	0.72/LOS C	0.002	No
Los Carneros Road/Mesa Road	1.10/LOS F	1.13/LOS F	0.029	Yes
Los Carneros Road/El Colegio Road	1.18/LOS F	1.20/LOS F	0.023	Yes
Stadium Road/El Colegio Road	0.67/LOS B	0.68/LOS B	0.014	No

¹ V/C ratio not applicable for stop-sign controlled intersections. LOS based on average vehicle delay.

Bolded values exceed impact thresholds.

The data presented in Table 4.12-7 indicate that most of the study-area intersections are forecast to operate at LOS C or better during the P.M. peak hour period under cumulative and cumulative + project conditions. The Los Carneros Road/Mesa Road intersection and the Los Carneros Road/El Colegio Road intersection are forecast to operate at LOS F. The project would add about 0.023 to 0.026 to the V/C ratio at these intersections, which would exceed the

**FACULTY AND FAMILY STUDENT HOUSING,
OPEN SPACE PLAN, & LRDP AMENDMENT EIR**

Section 4.12 cumulative thresholds for intersections operating at LOS F. With implementation of the
Traffic and identified improvements, this impact would be reduced to a less-than-significant level.
Circulation

4.12.6 References

The following is a list of references for this subsection. Please refer to Section 9.0 for the master reference list.

California Department of Transportation. 2002. Traffic Volumes on California State Highways.

Institute of Transportation Engineers. 2003. Trip Generation Manual, 7th edition. November.

National Research Council. 2000. Highway Capacity Manual, Transportation Research Special Report 209.

San Diego Association of Governments. 2002. San Diego Traffic Generators. April.

San Diego Association of Governments. 2002. San Diego Traffic Generators. April.

Santa Barbara County Public Works Department. 1999. *Goleta Transportation Improvement Plan*
2003. Goleta Traffic Model. November.

University of California, Santa Barbara and the County of Santa Barbara. 2002. Press Release, Joint Proposal for the Ellwood-Devereux Coast. March.

URS Corporation. 2003. Preliminary Concepts for the Ellwood-Devereux Coast Open Space and Habitat Management Plan. October.